



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,652	09/04/2003	David L. Chalupsky	P14969	8297
50890	7590	09/24/2007		
CAVEN & AGHEVLI c/o INTELLEVATE P.O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER WHIPPLE, BRIAN P	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 09/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/656,652

Applicant(s)

CHALUPSKY ET AL.

Examiner

Brian P. Whipple

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-52 are pending in this application and presented for examination.

Claims 7, 18, and 23-35 were amended by applicant's amendment filed on 9/7/07.

Response to Arguments

2. Applicant's arguments, see pg. 12, filed 9/7/07, with respect to the objections of claims 1, 14, and 48 have been fully considered and are persuasive. The claim objections of claims 1, 14, and 48 have been withdrawn.

3. Applicant's arguments, see pg. 12, filed 9/7/07, with respect to the 35 U.S.C. 112 rejections of claims 7, 18, 23, and 29 have been fully considered and are persuasive. The 35 U.S.C. 112 rejections of claims 7, 18, 23, and 29 have been withdrawn.

4. Applicant's arguments, see pg. 13, filed 9/7/07, with respect to the 35 U.S.C. 101 rejection of claim 23 have been fully considered and are persuasive. The 35 U.S.C. 101 rejection of claim 23 has been withdrawn.

5. Applicant argues Robert fails to teach selective determination. Examiner respectfully disagrees. Robert discloses the physical layer transceiver "configured to select, in order of descending priority, 100Base-TX, full duplex, 100Base-TX, half duplex, 10BaseT, full duplex, or 10BaseT, half duplex" ([0019], ln. 1-7), where the

Art Unit: 2152

physical layer transceiver and a corresponding link partner are determining the rate of transmission through such a selection ([0019], In. 1-7).

Additionally, Applicant argues Robert teaches away from claim 1 in that it “determine[s] the highest data rate for transmission.” Applicant is directed to [0020], In. 1-12, specifically “[the] low-power mode... minimizes power consumption... the controller... resets the selected data rate... to the low data rate... and restarts the autonegotiation process... for the lower data rate.”

Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Applicant's argument that Robert teaches away from claim 1 by determining the highest data rate for transmission, thus implying claim 1 is directed to determining a lower or lowest data rate for transmission) are not recited in the rejected claim(s). Claim 1 merely discloses a “new transmission speed” and fails to specify lower or higher. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6. Applicant argues Robert contemplates only a power down request and not the claimed speed change request. Applicant is directed to Robert's teaching of “the controller... receives a powerdown request...” ([0023], In. 1-3) and “the controller... resets the Autonegotiation... for negotiating a lower data rate” ([0024], In. 1-5). Further

Art Unit: 2152

evidence of the link between the powerdown request and a lower data rate can be found in the Abstract, ln. 6-10.

Additionally, Applicant argues Robert fails to disclose transmitting a speed change request and the new transmission speed to the linked network device or maintaining a linked exchange. Examiner respectfully disagrees. The transmission of a speed change request and the new transmission speed have been disclosed by Robert as discussed in the preceding paragraph (see Abstract, ln. 6-10; [0023], ln. 1-3; [0024], ln. 1-5). Furthermore, the link exchange inherently is maintained as Robert discloses autonegotiation between link partners ([0023], ln. 3-10), which is an exchange across a link.

7. Applicant argues all remaining independent claims should be allowable for similar reasons to claim 1 and that all dependent claims are allowable via their incorporation of claim 1. However, Examiner has maintained the rejection of claim 1 and thus maintains the rejections of all claims.

8. Applicant argues Robert fails to disclose increasing the transmission speed if the local network device is capable of transmitting at a transmission speed that is higher than the current transmission speed. Examiner respectfully disagrees. Robert's teachings are directed to minimizing power consumption through low-power data rates during periods of inactivity ([0027]). Inherently, Robert is capable of increasing its transmission speed when the period of inactivity comes to an end. To not do so would

Art Unit: 2152

eliminate the benefit of reducing transmission speed during periods of inactivity, as there would be no differentiation between the transmission speed of a period of activity. Furthermore, Robert explicitly states that “[t]he disclosed embodiment enables a workstation to utilize a high-speed data rate for optimum bandwidth during active use” ([0027], ln. 1-3).

Applicant’s additional argument that Robert fails to disclose “determining an anticipated increase of data transmissions through the local network device” nor “the new transmission speed is higher than the current transmission speed.” Examiner responds using the same reasoning as discussed in the preceding paragraph. The transmission speed is seen to be higher than the current transmission speed in the increase of transmission speed during periods of activity ([0027], ln. 1-3). Additionally, the detection of a system returning to active use and correspondingly increasing to a high-speed data rate is an anticipation of data transmissions. Inherently, the transmission speed is increased because a return to active use signals that the system is no longer inactive and data transmission across the network can be expected.

9. Applicant argues that the Office incorrectly interpreted claim 3 by eliminating the word “in” from the limitation. The exclusion of “in” from the limitation was a mere typo and this can be clearly seen in Murase, which discloses the speed change request being “[written]... into a packet” and in an idle transmission (Col. 3, ln. 64 – Col. 4, ln. 21; Col. 4, ln. 37-40). Murase discloses, “In another preferred construction, when the rate discriminating means judges the transmitting terminal to be in pause of

Art Unit: 2152

transmission, a preset value is taken for the first allowed transmission rate" (Col. 4, In. 37-40).

10. As to claim 13, Applicant argues Murase fails to disclose the language of the claim. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Ignoring said fact, Murase discloses adjusting an allowed transmission rate in response to detecting a pause in transmission for a transmitting terminal or correspondingly if "the transmitting terminal is not in pause of transmission, a maximum value allowed for a transmission in the network is taken for the first allowed transmission rate" (Col. 3, In. 64 – Col. 4, In. 21; Col. 4, In 41-44).

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2152

12. Claims 1-2, 4-12, 14-19, 21-24, 26-34, 36, 38-39, 41-42, 44-45, and 47-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Robert et al. (Robert), U.S. Publication No. 2004/0003296 A1.

13. As to claim 1, Robert discloses a method comprising: selectively determining a new transmission speed different from a current transmission speed between a local network device and a linked network device in response to a speed change event ([0019], ln. 1-7; [0020], ln. 1-12); and

transmitting a speed change request and the new transmission speed to the linked network device to request the local and linked network devices to communicate at the new transmission speed, wherein the transmitting occurs while maintaining a linked exchange between the local and linked network devices ([0023], ln. 1-3; [0024] – [0025]).

14. As to claim 2, Robert discloses transmitting the speed change request comprises including the speed change request and the new transmission speed in a data packet being transmitted to the linked network device at the current transmission speed ([0023], ln. 1-3; [0024] – [0025]; [0026], ln. 1-5).

15. As to claim 4, Robert discloses the linked network device in response to the speed change request returns positive acknowledgment to the local network device if

the linked network device is capable of transmitting at the new transmission speed ([0024] – [0026]).

16. As to claim 5, Robert discloses the local and linked network devices continue to transmit data at the current transmission speed until the linked network device returns a positive acknowledgment ([0023]).

17. As to claim 6, Robert discloses the linked network device in response to the speed change request returns negative acknowledgment to the local network device if the linked network device is not capable of transmitting at the new transmission speed ([0023]).

18. As to claim 7, Robert discloses the operation to change the transmission speed comprises an operation to either increase the transmission speed if the local network device is capable of transmitting at a transmission speed that is higher than the current transmission speed or decrease the transmission speed if the local network device is capable of transmitting at a transmission speed that is lower than the current transmission speed ([0023] – [0027]).

19. As to claim 8, Robert discloses maintaining transmission information indicating transmission capabilities of the linked network device, wherein the determined new transmission speed is a new transmission speed that the transmission information indicates that the linked network device is capable of performing ([0023]).

20. As to claim 9, Robert discloses setting a register in the local network device to indicate the new transmission speed, wherein a device driver used to communicate with the local network device determines the new transmission speed, wherein setting the register in the local network device comprises the device driver changing advertised capabilities of the local network device indicated in the register, and wherein transmitting the speed change request comprises restarting an auto-negotiation process that selects a common transmission speed based on the changed advertised capabilities in the local network device (Fig. 1-2; [0023] – [0026]).

21. As to claim 10, Robert discloses the determined new transmission speed is higher than the current transmission speed, and wherein changing the advertised capabilities comprises removing any transmission speeds indicated in the advertised capabilities of the local network device that are less than the determined new transmission speed (Fig. 1-2; [0023] – [0027]).

22. As to claim 11, Robert discloses the determined new transmission speed is lower than the current transmission speed, and wherein changing the advertised capabilities comprises removing any transmission speeds indicated in the advertised capabilities of the local network device that are higher than the determined new transmission speed (Fig. 1-2; [0023] – [0027]).

Art Unit: 2152

23. As to claim 12, Robert discloses the speed change event comprises an application program determining an anticipated increase of data transmission through the local network device, and wherein the new transmission speed is higher than the current transmission speed ([0027]).

24. As to claims 14, 23, and 48, the claims are rejected for the same reasons as claim 1 above.

25. As to claims 15 and 26, the claims are rejected for the same reasons as claim 4 above.

26. As to claims 16 and 27, the claims are rejected for the same reasons as claim 5 above.

27. As to claims 17 and 28, the claims are rejected for the same reasons as claim 6 above.

28. As to claims 18 and 29, the claims are rejected for the same reasons as claim 7 above.

29. As to claims 19 and 30, the claims are rejected for the same reasons as claim 8 above.

Art Unit: 2152

30. As to claim 21, the claim is rejected for the same reasons as claim 1 above.

Additionally, Robert discloses a workstation system ([0017] – [0018]).

31. As to claims 22 and 31, the claims are rejected for the same reasons as claim 9 above.

32. As to claim 24, the claim is rejected for the same reasons as claim 2 above.

33. As to claim 32, the claim is rejected for the same reasons as claim 10 above.

34. As to claim 33, the claim is rejected for the same reasons as claim 11 above.

35. As to claim 34, the claim is rejected for the same reasons as claim 12 above.

36. As to claim 36, Robert discloses the speed change event is based on a change in desired power consumption ([0006]; [0008]; [0011]).

37. As to claims 38, 41, 44, 47, and 49-50, the claims are rejected for the same reasons as claim 5 above.

38. As to claims 39, 42, 45, and 51, the claims are rejected for the same reasons as claim 36 above.

Claim Rejections - 35 USC § 103

39. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

40. Claims 3, 13, 20, 25, 35, 37, 40, 43, 46, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robert as applied to claims 1, 14, 21, 23, and 48 above, in view of Murase et al. (Murase), U.S. Patent No. 6,298,042 B1.

41. As to claim 3, Robert discloses the invention substantially as in parent claim 1, including transmitting the speed change request comprises including the speed change request and the new transmission speed in a data packet at the current transmission speed ([0023], ln. 1-3; [0024] – [0025]; [0026], ln. 1-5).

Robert is silent on the packet being a preamble packet that is transmitted at the beginning of data packets or, alternatively, in an idle transmission between packets to synchronize data transmissions.

However, Murase discloses the packet being transmitted in an idle transmission between packets to synchronize data transmissions (Col. 3, ln. 64 – Col. 4, ln. 21; Col. 4, ln. 37-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Robert by using an idle transmission to synchronize data transmissions as taught by Murase in order to prevent the network from being suddenly applied with a high load without any rapid change of the actual transmission rate to a high value (Murase: Col. 3, ln. 45-47).

42. As to claim 13, Robert discloses the invention substantially as in parent claim 1, but is silent on the speed change event is based on a detected change in network traffic at the local network device.

However, Murase discloses the speed change event is based on a detected change in network traffic at the local network device (Col. 3, ln. 64 – Col. 4, ln. 21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Robert by detecting a change in network traffic to change speed as taught by Murase in order to prevent the network from being suddenly applied with a high load without any rapid change of the actual transmission rate to a high value (Murase: Col. 3, ln. 45-47).

43. As to claims 20, 35, 37, 40, 43, 46, and 52, the claims are rejected for the same reasons as claim 13 above.

44. As to claim 25, the claim is rejected for the same reasons as claim 3 above.

Conclusion

45. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Whipple whose telephone number is (571) 270-1244. The examiner can normally be reached on Mon-Fri (8:30 AM to 5:00 PM EST).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2152

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BPW

Brian P. Whipple
9/11/07


BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER
9/17/7